

Surface Mount

Frequency Mixer

Level 17 (LO Power +17 dBm) 400 to 2800 MHz

Maximum Ratings

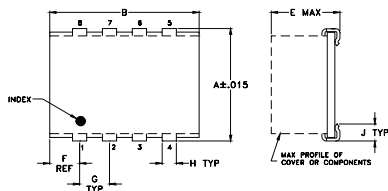
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA

Permanent damage may occur if any of these limits are exceeded.

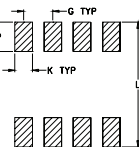
Pin Connections

LO	5
RF	1
IF	7
GROUND	2,3,4,6,8

Outline Drawing



PCB Land Pattern

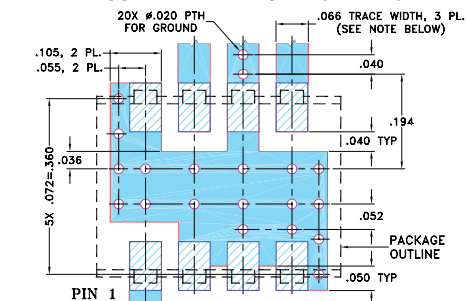


Suggested Layout,
Tolerance to be within $\pm .002$

Outline Dimensions ($\frac{\text{inch}}{\text{mm}}$)

A	B	C	D	E	F	G
.395	.500	--	.100	.230	.100	.100
10.03	12.70	--	2.54	5.84	2.54	2.54
H	J	K	L			wt
.047	.065	.065	.425			grams
1.19	1.65	1.65	10.80			0.80

Demo Board MCL P/N: TB-259
Suggested PCB Layout (PL-080)



NOTE: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS 0.030" $\pm$ 0.002"; COPPER: 1/2 OZ. EACH SIDE.
FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
 DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

5 COPPER LAND PATTERN FREE OF SOLDERMASK
P.O. Box 350166, Brooklyn, New York 11235

Features

- wide bandwidth, 400 to 2800 MHz
- good IP3, 23 dBm typ.
- high L-R isolation, 40 dB typ.

Applications

- cellular
- satellite distribution
- PCS, DCS, UMTS
- MMDS

Electrical Specifications

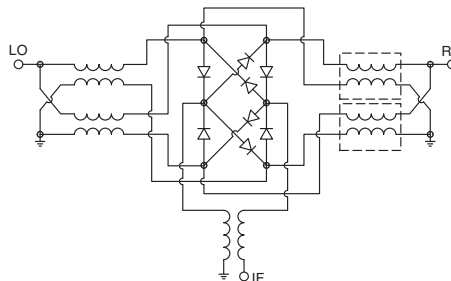
FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)
LO/Rf	IF	Mid-Band m			Total Range Max.	Typ.	Min.	Typ.	Min.	
		$\overline{X}$	σ	Max.						
400-2800	4-700	6.3	.20	8.0	9.0	40	25	30	15	23

1 dB COMP.: +10 dBm typ.
m=mid band [$2f_c$ to $f_c/2$]

Typical Performance Data

Frequency (MHz)		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm
400.00	430.00	6.35	39.96	42.42	1.21	2.00
535.85	565.85	6.15	39.94	40.97	1.38	1.68
671.70	701.70	6.13	39.08	39.25	1.60	1.53
800.00	830.00	6.36	39.17	39.90	1.78	1.43
943.40	973.40	6.03	37.63	38.28	2.01	1.41
1079.25	1109.25	5.82	37.76	38.87	2.21	1.39
1169.81	1199.81	5.76	36.05	39.48	2.31	1.37
1260.38	1290.38	5.78	35.62	40.30	2.28	1.36
1400.00	1430.00	5.83	33.66	40.46	2.46	1.32
1486.79	1516.79	5.96	33.40	40.25	2.52	1.33
1622.64	1592.64	6.05	33.61	40.84	2.61	1.35
1713.21	1683.21	6.22	34.09	41.86	2.70	1.35
1803.77	1773.77	6.41	36.18	41.43	2.77	1.36
1984.91	1954.91	6.36	38.60	49.09	2.85	1.37
2075.47	2045.47	6.23	36.96	45.57	2.87	1.40
2211.32	2181.32	6.17	37.30	45.52	2.80	1.54
2347.17	2317.17	6.42	35.31	42.38	2.63	1.75
2483.02	2453.02	6.71	35.03	38.65	2.42	2.06
2618.87	2588.87	7.05	34.27	36.72	2.13	2.36
2800.00	2770.00	8.39	31.73	33.90	1.98	2.80

Electrical Schematic



For detailed performance specs
& shopping online see web site



CASE STYLE: BJ293

PRICE: \$21.95 ea. QTY (1-9)

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications



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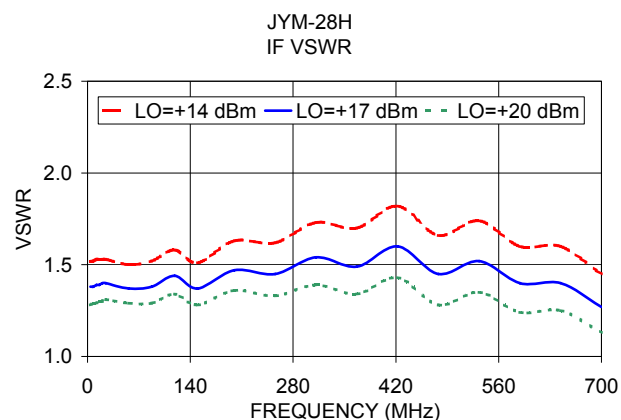
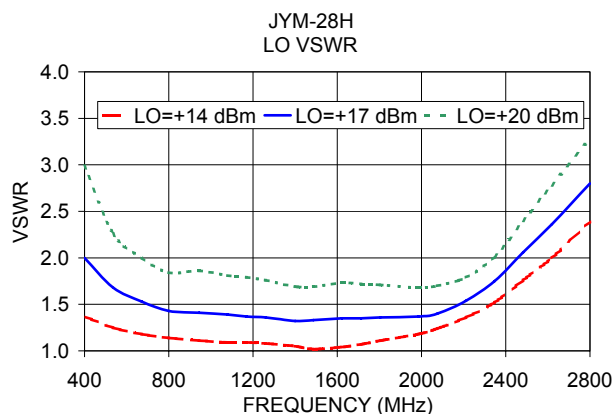
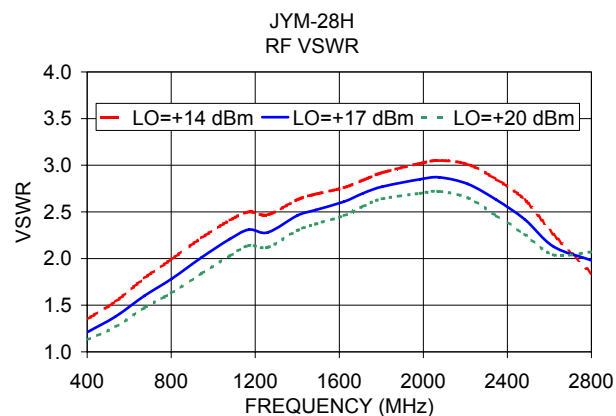
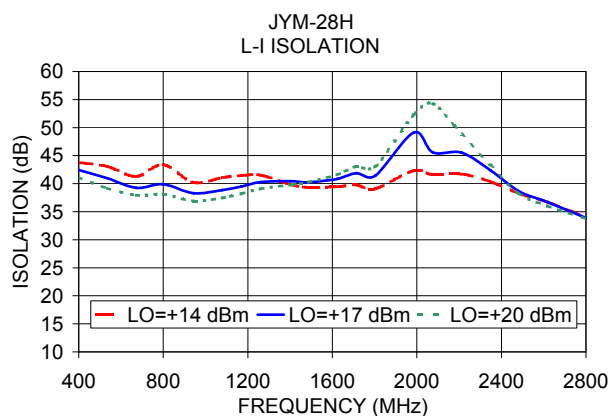
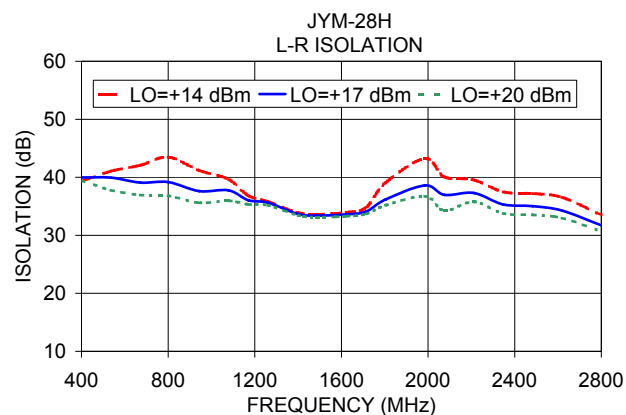
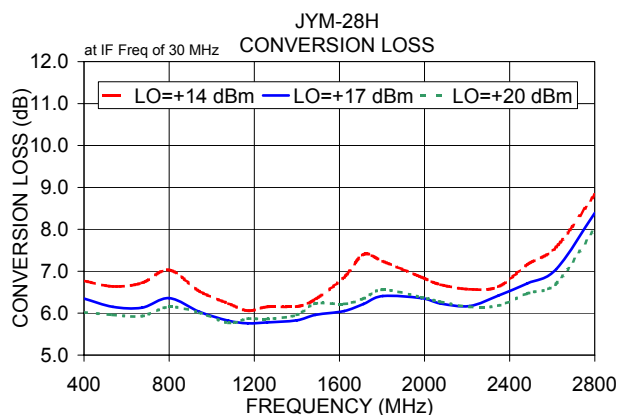
IF/RF MICROWAVE COMPONENTS

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REV. B
M102713
JYM-28H
EDR-1815
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130328
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Performance Charts

JYM-28H+ JYM-28H



For detailed performance specs
& shopping online see web site

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